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September 30, 2002

Mr. Fred Micke, On-Scene Coordinator Ms. Verneta Simon, On-Scene Coordinator U. S. Environmental Protection Agency Region 5 77 W. Jackson Blvd., SE-5J Chicago, Illinois 60604



Re:

Response to Review Comments dated September 20, 2002, Regarding Work Plan for Investigation and Removal of Radiologically-Impacted Soil dated June 24, 2002, Lakeshore East LLC – STS Project No. 1-32193-XA

Dear Mr. Micke and Ms. Simon:

Attached please find an item-by-item response to your comments of September 20, 2002. These responses have been incorporated into the enclosed September 30, 2002, revision of the Work Plan.

We appreciate your assistance with this project.

Regards,

STS CONSULTANTS, LTD.

Steven C. Kornder, Ph.D. Senior Geochemist

Richard G. Berggreen, C.P.G.

Principal Geologist

cc: David Carlins, Lakeshore East, LLC
Sean Bezark, Altheimer & Gray
Barbara Magel, Karagenis, White & Magel
Mark Krippel, Kerr-McGee Chemical LLC
Glenn Huber, SAHCI
Buster Maxwell, Budron Excavating
Steve Hawks, Hawks Logistics

Response to USEPA comments (September 20, 2002) regarding the Work Plan for Lakeshore East

1) Page 4, Section 2.1, part 2 – If contaminants are below groundwater and will be left a water sample should be taken and some mechanism provided to identify for future encounters where the contaminants are.

Response: The following paragraph will be included following the second paragraph of Section 2.1:

If radiologically impacted material below groundwater will be left at the Site, a groundwater sample of the standing water within the excavation will be collected and analyzed for radiological impact. In addition, the location of impacted material that will remain at the Site will be referenced to surveyed coordinates based on traditional land surveying techniques to facilitate the accurate representation of the material in reports and on drawings.

2) Page 4, Section 2.1, pan 4 and Section 2.3, para. 1- If radiological monitoring begins 2 feet down some contaminant may be missed. This is because only 12 inches of soil will shield out 97% of the dose rate from buried contaminant. Monitoring should probably begin with the first 18 inch lift.

Response: The text will be amended in both sections to indicate radiological surveys will be completed in those areas covered by greater than 18-inches of post 1900 fill soil.

3) Page 13, Section 3.3, Materials Management, last paragraph: Change "In that is" to "If that is".

Response: The requested change will be incorporated.

The following USEPA comments are in response to the STS comments letter dated September 13, 2002.

Response 20: Section 4.2 in SOP-212 does not commit to an unobstructed path from the source to the sampler.

With a site this large 4 high volume air monitor measurements at the N, S, E and W perimeters will not adequately determine the general public air concentrations. There will be large gaps in the sampling zones. Consideration must be given to tightening the sampling perimeter. If a smaller perimeter was used it would not have to be fixed but could be moved as the excavation activities proceed. Air monitoring spacings used at the River East or North McClurg Sites would be sufficient.

In addition, the order of excavation should be stated in the Work Plan, i.e., will work start near the north or south, etc. Somewhere, this should be stated so that proper dust control measures can be arranged.

Response: Text as been added to SOP-212 to indicate that the monitors will be located to provide unobstructed air flow from the source to the monitors.

Section 4.5.2 indicates that perimeter monitoring will be conducted at the property boundary or no more than 200 feet from the limits of the areas anticipated to be excavated. A similar sentence has been added to SOP-212 in Section 4.2.

A sentence has been added to the first paragraph of Section 2.2 to indicate that it is anticipated that removal of radiological materials will start with the impacted areas identified in the southern portion of the property.

Response 22: Section 2 in SOP-212 references 32 IAC 340.320 when the citation should be to 10 CFR 20 unless 32 IAC is more restrictive.

Response: The reference in 5.4.2.4 will be changed to indicate "10 CFR Part 20 unless 32 IAC is more restrictive".

Response 41: The radium-226 and radium-228 guidelines in Regulatory Guide 1.86 are 20 dpm/100 cm<sup>2</sup>. These are more restrictive than the IDNS 33 dpm/100 cm<sup>2</sup>.

Response: The requested change from 33 dpm/100cm<sup>2</sup> to 20 dpm/100 cm<sup>2</sup> has been incorporated into Table 7.1 of the Health and Safety Plan.

## STS Consultants, Ltd.

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## **FACSIMILE TRANSMISSION**

Date:	October 2, 2002				
To:	Fred Micke				
	Vemeta Simon				
~~~	U. S. Environmental Prote	ction Agency			
Fax No	o.: 312-353-9176				
Pages	being transmitted, incl. Co	over: 4			
CC:		Fax No.:			
From:	Rich Berggreen	Phone:	847-279-2500		
Re:		77.77		· · · · · · · · · · · · · · · · · · ·	
Urger	nt For Signature For Rev	view Please Comment/Repty	As Requested	☑ Original to Follow	
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